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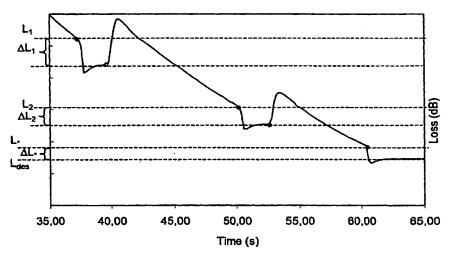
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(54) Title: ATTENUATOR

Real time measurement of loss



(57) Abstract: In the manufacture of an optical attenuator having a desired value of the optical loss end regions of two optical fibers are placed with an offset in the transverse direction in relation to each other and having their end surface at each other. Thereafter the region at end surfaces is heated to make the ends melt to each other and the heating is then further continued. To achieve the desired loss in the finished attenuating splice the further heating is stopped for an optical loss exceeding the desired loss by a calculated value. This value can be obtained from measurements in real time of the loss for the splice during the continued heating. The measurements can be made at the beginning and end of an interrupt of the further heating. An attenuator manufactured in this way obtains an attenuation that accurately aggres with the desired value.



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A. CLASSIFICATION OF SUBJECT MATTER IPC7: G02B 6/255 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC7: G02B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SE,DK,FI,NO classes as above Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-INTERNAL, WPI DATA, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. WO 9524665 A (TELEFONAKTIEBOLAGET LM ERICSSON), 1,7 Α 14 Sept 1995 (14.09.95) EP 0594996 A2 (SIEMENS AKTIENGESELLSCHAFT), 4 May 1.7 A 1994 (04.05.94) EP 0690318 A1 (FUJITSU LIMITED), 3 January 1996 A 1,7 (03.01.96)Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination document referring to an oral disclosure, use, exhibition or other being obvious to a person skilled in the art document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 1.2 -06- 2002 <u>6 June 2002</u> Name and mailing address of the ISA/ Authorized officer Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Magnus Westöö/MN

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